## **OBITUARY – JOHN ROBERT DE LAETER 1933–2010**

John De Laeter was a physicist, science luminary and pillar of modern geochronology in Western Australia. He was also President of the Royal Society of Western Australia (1980–1981) and recipient of the Medal of the Royal Society of Western Australia in 1993. John helped advance science education and influenced the direction of physical sciences research in Western Australia, leading research in dating the Earth's mantle and exploring the extremities of the Solar System. Among his many scientific achievements are the measurement of the atomic weight of 12 elements and mapping the geological ages of many regions of Western Australia. His colleagues at the John De Laeter Centre for Isotope Research recently discovered the world's most ancient minerals at Jack Hills.

John began his career as a science teacher at Bunbury High School in 1959 but, at a Science Teacher's conference in Sydney, a debate on the origins of the universe inspired him to return to university to study nuclear astrophysics. After completing a PhD at the University of Western Australia (UWA) and a Fellowship in nuclear physics in Canada, he took up the position of Head of the Department of Physics at the Western Australian Institute of Technology (now Curtin University) in 1968 (aged 34), where he oversaw the commissioning of its first mass spectrometer.

John's major research interests became the application of mass spectrometry to cosmochemistry, nuclear physics, and geological problems including the containment of radioactive waste, measuring the age of rocks, evaluation of atomic weights and the origin of chemical elements. In the 1970s he established a project with the Geological Survey of Western Australia to develop a geochronology capability based on Rb–Sr decay system, and in the 1980s, with UWA now on the team, jointly developed capabilities in the areas of Sm– Nd and U–Pb geochronology.

In 1984, as Deputy Vice-Chancellor of Research and Development at Curtin University, John spearheaded a proposal for a new SHRIMP ion microprobe and SHRIMP zircon U–Pb dating became the geochronology method of choice for geologists. In 1998 the consortium received funding from the WA State Centre of Excellence Program to further develop isotope science. This saw the establishment of the John De Laeter Centre for Mass Spectrometry, recently renamed the John De Laeter Centre for Isotope Research. In the following years organic chemistry facilities were established, CSIRO joined the consortium and a second SHRIMP was commission in the Centre.

In his various administrative and educational roles at Curtin University, John negotiated with the university, businesses and State Government to invest in visionary projects that are now outstandingly successful facilities. These include Technology Park (Chair, 1988–2003, and then Patron); the Science and Mathematics Education Centre at Curtin University, the Scitech Discovery Centre (Deputy Chair, 1988–1996, and then Patron); and the Gravity Discovery Centre at Gingin (Foundation Chair).



John De Laeter AO, PhD, DSc, BSc (Hons), BEd (Hons), DTech (hc) (Curtin), DLitt (hc) (UWA), FTSE, FAIP: 3 May 1933–16 August 2010

Community positions he held included President of the Western Australian Conservation and Environment Council, Governor of the Clunies Ross Foundation and captain of an Australian veterans hockey team. He was also a Lay Preacher in the Uniting Church.

John received many awards including the Order of Australia (1992), Medal of the Royal Society of Western Australia (1993), a Fellowship of the Australian Academy of Technological Sciences and Engineering, an Honorary Doctor of Technology from Curtin University (1995). In respect of his research in astrophysics, a minor planet (Minor Planet De Laeter 3893) was named after him.

In 1995 when John retired as Curtin Deputy Vice-Chancellor of Research and Development, an international conference on Isotope Science was held to formally recognise his research achievements. The two day De Laeter Symposium on Isotope Science was held in November 1995 and attracted delegates from the European Community, the United States, Canada, Japan and Australia. Papers based on the presentations at the conference were published in a special volume of the Journal of the Royal Society of Western Australia (Vol. 79, Part 1, 1996).

John De Laeter's legacy will be perpetuated in many ways—in his large body of published works, Minor Planet De Laeter, the John De Laeter Building at Curtin University, Scitech, the Gravity Centre, the colleagues that carry on his tradition of collaborative work and the John De Laeter Centre for Isotope Research that is continually producing new techniques and data that shape our understanding of the Earth and its place in the Universe.

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